

<b>UNDERSTANDING ALCOHOL: INVESTIGATIONS INTO BIOLOGY AND BEHAVIOR</b>		
<b>West Virginia Science Content Standards and Objectives – Grades 6, 7, 8</b>		
<b>Lesson</b>	<b>Standard</b>	<b>Objective</b>
<b>1, 3</b>	<b>SC.6.1.1 SC.7.1.1 SC.8.1.1</b>	Explain that scientists formulate and test their explanations of nature using observation and experiments.
<b>3, 4</b>	<b>SC.6.1.2 SC.7.1.2 SC.8.1.2</b>	Recognize that scientific knowledge is subject to modification as new scientific information challenges current theories.
<b>All lessons</b>	<b>SC.6.2.1 SC.7.2.1 SC.8.2.1</b>	Cooperate and collaborate to ask questions, find answers, solve problems, and conduct investigations to further an appreciation of scientific discovery.
<b>1, 2, 3, 4</b>	<b>SC.6.2.2 SC.7.2.2 SC.8.2.2</b>	Formulate conclusions through close observations, logical reasoning, objectivity, perseverance and integrity in data collection.
<b>All lessons</b>	<b>SC.6.2.3 SC.7.2.3 SC.8.2.3</b>	Apply skepticism, careful methods, logical reasoning and creativity in investigating the observable universe.
<b>1, 2, 3, 4, 5</b>	<b>SC.6.2.4 SC.7.2.4 SC.8.2.4</b>	Use a variety of materials and scientific instruments to conduct explorations, investigations and experiments of the natural world (e.g., barometer, anemometer, microscope, computer).
<b>3, 4, 5</b>	<b>SC.6.2.5 SC.7.2.5 SC.8.2.5</b>	Demonstrate safe techniques for handling, manipulating and caring for science materials, equipment, natural specimens and living organisms.
<b>2, 3, 4, 5</b>	<b>SC.6.2.6 SC.7.2.6 SC.8.2.6</b>	Utilize experimentation to demonstrate scientific processes and thinking skills (e.g., formulating questions, predicting, forming hypotheses, quantifying, identifying dependent and independent variables).
<b>2, 3, 4, 5, 6</b>	<b>SC.6.2.7 SC.7.2.7 SC.8.2.7</b>	Construct and use charts, graphs and tables to organize, display, interpret, analyze and explain data.

WEST VIRGINIA ALIGNMENT FOR NIH SUPPLEMENT UNDERSTANDING ALCOHOL: INVESTIGATIONS INTO BIOLOGY AND BEHAVIOR

<b>All lessons</b>	<b>SC.6.2.8 SC.7.2.8 SC.8.2.8</b>	Use inferential reasoning to make logical conclusions from collected data.
<b>2, 3, 4, 5, 6</b>	<b>SC.6.2.9 SC.7.2.9 SC.8.2.9</b>	Use appropriate technology solutions to gather data; graph data; interpret data; and analyze information.
<b>2, 3, 4</b>	<b>SC.6.3.2 SC.7.3.2 SC.8.3.2</b>	Construct a variety of useful models of an object, event, or process.
<b>2, 3, 4, 5</b>	<b>SC.6.3.3 SC.7.3.3 SC.8.3.3</b>	Compare and contrast changes that occur in an object or a system to its original state.
<b>2, 3</b>	<b>SC.7.4.4</b>	Compare the level of organization of cells, tissues and organs in living things.
<b>3, 4</b>	<b>SC.7.4.9</b>	Relate how an organism's behavior response is a combination of heredity and environment.
<b>4, 5, 6</b>	<b>SC.7.5.1</b>	Make and compare different proposed solutions to an identified problem in light of specified criteria.
<b>4, 5, 6</b>	<b>SC.6.6.1 SC.7.6.1 SC.8.6.1</b>	Use scientific reasoning and the knowledge of science and technology to make informed personal decisions at the local and global levels.
<b>4, 5, 6</b>	<b>SC.6.6.2 SC.7.6.2 SC.8.6.2</b>	Evaluate and critically analyze mass media reports of scientific developments and events.

**West Virginia Math Content Standards and Objectives – Grades 6, 7, 8**

<b>Lesson</b>	<b>Standard</b>	<b>Objective</b>
<b>2, 3, 4, 5</b>	<b>MA.6.1.6</b>	Solve problems in context involving addition, subtraction, multiplication, and division of whole numbers, fractions, mixed numbers and decimals.
<b>2, 4, 5</b>	<b>MA.6.1.8</b>	Convert between fractions, mixed numbers, decimals and percents.
<b>2, 4, 5</b>	<b>MA.6.1.9</b>	Find the percent of a number.
<b>2, 3, 4, 5</b>	<b>MA.6.2.9</b>	Use variables to represent and solve real world problems appropriate for the 6 <sup>th</sup> grade using multiple strategies.

WEST VIRGINIA ALIGNMENT FOR NIH SUPPLEMENT UNDERSTANDING ALCOHOL: INVESTIGATIONS INTO BIOLOGY AND BEHAVIOR

2, 3, 4, 5, 6	MA.6.5.1	Collect, organize, display, and read data using appropriate graphs and tables.
2, 3, 4, 5	MA.7.1.5	Perform operations with integers (e.g., addition, subtraction, multiplication, division).
2, 3, 4, 5	MA.7.1.7	Solve application problems with whole numbers, decimals, fractions and percents.
2, 4, 5	MA.7.2.6	Use ratios and proportions to represent and solve application problems.
2, 3, 4, 5	MA.7.2.13	Represent and solve real world problems appropriate for 7 <sup>th</sup> grade using multiple strategies.
5	MA.7.4.4	Convert units of measurement within and between customary and metric systems.
2, 3, 4, 5, 6	MA.7.5.3	Collect, organize, graphically represent, and interpret data displays including: frequency distributions, line plots, scatter plots, box and whiskers, and multiple-line graphs.
2, 3, 4, 5	MA.8.1.6	Solve application problems with whole numbers, decimals, fractions, percents and integers including, but not limited to, rates, tips, discounts, sales tax and interest.
2, 4, 5	MA.8.2.3	Use ratio and proportion to create and solve equations.
2, 3, 4, 5	MA.8.2.10	Represent and solve real world problems appropriate for 8 <sup>th</sup> grade using multiple strategies.
2, 3, 4, 5, 6	MA.8.5.3	Create and extrapolate information from multiple-bar graphs, box and whisker plots, and other data displays using appropriate technology.
4, 5, 6	MA.8.5.4	Analyze problem situations, games of chance, and consumer applications using statistical samplings to determine probability and make predictions.
4, 5, 6	MA.8.5.5	Draw inferences and construct convincing arguments, including misuses of statistical or numeric information, based on data analysis.
<b>West Virginia Reading and Language Arts Content Standards and Objectives – Grades 6, 7, 8</b>		
<b>Lesson</b>	<b>Standard</b>	<b>Objective</b>
All lessons	RLA.8.1.3	Use comprehension strategies (e.g., make judgments; hypothesize; critique; analyze).
3, 4, 5, 6	RLA.6.1.4	Analyze text to determine transitional words/language.
All lessons	RLA.6.1.5 RLA.7.1.4	Use comprehension strategies (e.g., generalize; evaluate; infer; paraphrase, draw conclusions, interpret meaning).
All lessons	RLA.6.1.10 RLA.8.1.10	Use resource materials (e.g., dictionary; glossary; thesaurus) to determine the meaning of unknown words or multiple meaning words.
All lessons	RLA.6.1.11	Use connotation and denotation to understand meaning.

WEST VIRGINIA ALIGNMENT FOR NIH SUPPLEMENT UNDERSTANDING ALCOHOL: INVESTIGATIONS INTO BIOLOGY AND BEHAVIOR

<b>All lessons</b>	<b>RLA.6.1.12 RLA.7.1.13 RLA.8.1.11</b>	Use root words, prefixes and suffixes to spell words, change word meanings and generate new words appropriate to grade level.
<b>2, 6</b>	<b>RLA.6.2.2 RLA.7.2.1 RLA.8.2.2</b>	From a prompt, use the writing process to develop a composition that contains specific, relevant details and transitions.
<b>2, 5, 6</b>	<b>RLA.6.2.3</b>	Use writing strategies to address specific writing purposes (e.g., creative; journalistic; essay; narrative; informative; persuasive) and address various audiences (e.g., peers; teachers; employers).
<b>2, 5, 6</b>	<b>RLA.7.2.3</b>	Use the writing process to compose various types of writing (e.g., creative; informative; expository; persuasive; articles; essays; journals; letters; poetry; research/reports).
<b>2, 3, 4, 5, 6</b>	<b>RLA.6.2.19</b>	Use traditional organizers to create, read, interpret and organize information in the form of tables, graphs, diagrams and charts.
<b>All lessons</b>	<b>RLA.6.3.1 RLA.7.3.1 RLA.8.3.1</b>	Recognize and exhibit oral communication skills (e.g., volume; rate; audience etiquette).
<b>6</b>	<b>RLA.8.3.2</b>	Present an oral report with graphic aids (e.g., tables; graphs; diagrams; charts).
<b>All lessons</b>	<b>RLA.8.3.3</b>	Think critically about oral/visual information presented; relate personal experiences and apply the information to global situations.
<b>All lessons</b>	<b>RLA.6.3.3 RLA.7.3.4 RLA.8.3.4</b>	Listen in order to comprehend topic and purpose (e.g., of a guest speaker; informational video; televised interview; radio news program).
<b>All lessons</b>	<b>RLA.6.3.4</b>	Reach consensus in group discussions or settings.
<b>All lessons</b>	<b>RLA.7.3.5 RLA.8.3.5</b>	Play a variety of roles in group discussions, including active listener and discussion leader and/or facilitator.
<b>West Virginia Health Content Standards and Objectives – Grades 6, 7, 8</b>		
<b>Lesson</b>	<b>Standard</b>	<b>Objective</b>
<b>All lessons</b>	<b>HE.6.1.2</b>	Identify the negative effects of alcohol, drugs, and tobacco.
<b>2, 5</b>	<b>HE.6.4.1</b>	Recognize that people grow and mature at different rates and have different body types than those portrayed by the media.

WEST VIRGINIA ALIGNMENT FOR NIH SUPPLEMENT UNDERSTANDING ALCOHOL: INVESTIGATIONS INTO BIOLOGY AND BEHAVIOR

<b>1, 6</b>	<b>HE.6.4.2</b>	Analyze the influence that advertisers have on consumer choices (e.g., tobacco, alcohol and other consumer products).
<b>2, 3, 4, 5</b>	<b>HE.6.4.3</b>	Identify the importance of respecting people's differences.
<b>4, 5, 6</b>	<b>HE.6.6.2</b>	Explain how the goal setting and decision-making processes are important in designing strategies to quit using tobacco and other risking behaviors.
<b>4, 5, 6</b>	<b>HE.7.2.2</b>	Identify situations that require professional health services and community resources that can provide those services.
<b>2, 3, 4, 5</b>	<b>HE.7.4.3</b>	Recognize the importance of respecting individual differences.
<b>1, 6</b>	<b>HE.7.4.4</b>	Analyze media message about alcohol, tobacco, and other drugs.
<b>2, 3, 4, 5, 6</b>	<b>HE.7.6.3</b>	Clarify the process of a decision making model; predict situations and practice skills requiring decisions with alcohol, tobacco and other drugs.
<b>1, 6</b>	<b>HE.8.4.1</b>	Recognize bias in advertising and misleading media communication about health information, products and services.
<b>3, 4, 5, 6</b>	<b>HE.8.6.1</b>	Identify personal health goals and choose strategies regarding nutrition and alcohol, tobacco, drug use and personal safety to achieve optimal personal health.
<b>4, 5, 6</b>	<b>HE.8.6.3</b>	Describe how personal health goals are influenced by changing information, abilities, priorities and responsibilities.
<b>5, 6</b>	<b>HE.8.7.4</b>	Explain the need for legislation to protect and promote personal safety and health.